PATENT
Attorney Docket No. **05788.0124**

5/17
5/25/00
M Bridges

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)	
	)	
Paola CARACINO et al.	)	
	)	
Serial No.: Unassigned	)	Group Art Unit: Unassigned
	)	
Filed: February 4, 2000	)	Examiner: Unassigned
	)	
For: HIGH TEMPERATURE SUPERCONDUCTING CABLE AND PROCESS FOR MANUFACTURING THE SAME	)	

being a **Continuation** of PCT International Application No. PCT/EP98/04991 filed July 28, 1998

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

PRELIMINARY AMENDMENT

Before examining this application, please amend the application as follows:

IN THE SPECIFICATION:

Please amend the specification as follows:

Page 1, before line 4, insert --This application is a continuation of International Application No. PCT/EP98/04991, filed July 28, 1998, the content of which is incorporated herein by reference.--

A1 and B1

B1

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IN THE CLAIMS:

Please amend claims 1, 3-10, 18 and 20-24; cancel claims 2 and 19 without prejudice or disclaimer; and add new claims 25 and 26, as follows:

1. (Amended) A high temperature superconducting cable, comprising a tubular support, a plurality of superconducting tapes including a superconducting material enclosed in a metal covering and spirally wound onto the support so as to form at least an electroinsulated, thermally insulated and refrigerated superconducting layer, characterized in that the superconducting tapes [have a maximum tensile deformation greater than 3%] comprise at least a metal strip coupled to the metal covering.

3. (Amended) The cable according to claim [2] 1, wherein the superconducting tapes comprise two metal strips coupled to the metal covering.

4. (Amended) The cable according to claim [2] 1, wherein the metal covering is made of silver or silver-based alloy with magnesium [and/or], aluminum [and/] or nickel or mixtures thereof.

5. (Amended) The cable according claim [2] 1, wherein the metal strip is coupled to the metal covering by welding.

6. (Amended) The cable according to claim [2] 1, wherein the metal strip is coupled to the metal covering by brazing.

7. (Amended) The cable according to claim [2] 1, wherein the metal strip is coupled to the metal covering by gluing.

8. (Amended) The cable according to claim [2] 1, wherein the strip is made of non magnetic stainless steel having a low electric conductivity.

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Cont A3

9. (Amended) The cable according to claim [2] 1, wherein the strip is made of bronze.

10. (Amended) The cable according to claim [2] 1, wherein the strip is made of aluminium.

A4

18. (Amended) A process for manufacturing high temperature superconducting cables, comprising the steps of:

[-] providing a tubular support,

[-] enclosing a superconductive material in a metal covering, so as to form superconductive tapes,

[-] spirally winding a plurality of superconducting tapes onto the support so as to form at least a superconducting layer,

[-] electroinsulating the superconductive layer,

[-] thermally insulating the superconductive layer,

[-] providing the possibility of refrigerating the superconductive layer below a predetermined working temperature, when cables are in use,

characterized by

[- controlling the maximum tensile deformation of the superconducting tapes to have it greater than 3%.]

coupling at least a metal strip to the metal covering of the superconducting tapes.

A5

20. (Amended) Process according to claim [19] 18, further comprising the step of:

[-] coupling two metal strips to the metal covering of the superconducting tapes.

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21. (Amended) Process according to claim [19] 18, wherein the coupling step is performed by welding.

22. (Amended) Process according to claim [19] 18, wherein the coupling step is performed by brazing.

23. (Amended) Process according to claim [19] 18, wherein the coupling step is performed by glueing.

24. (Amended) Process according to claim [1] 18, wherein the tubular support is made of metal and the winding angle of the superconductive tapes on the metal tubular support is smaller than 40°.

Please add the following new claims:

--25. The cable according to claim 1, wherein the superconducting tapes have a maximum bearable tensile deformation greater than 3% during manufacturing and installation.

26. Process according to claim 18, further comprising the step of:

controlling the maximum bearable tensile deformation of the superconducting tapes during manufacturing and installation to a value greater than 3%.--

REMARKS

The claims have been amended to conform them to the Article 34 amendment filed in PCT/EP98/04991.

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Claims 1, 3-18 and 20-26 are pending in this application. No new matter has been added.

Respectfully submitted,

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Dated: February 4, 2000

02/04/2000 12:55 PM

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